

What is claimed:

1. A system to facilitate the invocation of a CICS transaction within a server central processing unit via a client central processing unit communicated request, converting said invoked transaction's output to an XML document and the communicating of said XML document to said client central processing unit comprising:

at least one server central processing unit executing CICS under the dispatching control of said server's operating system;

at least one client central processing unit; and

software executing within said server central processing unit which adapts said server to respond to a request communicated from said client central processing unit by invoking the execution of a CICS transaction within said server, converting said executed transaction's output to an XML document and communicating said XML document to said client central processing unit.

2. The system of claim 1 further comprising at least one intermediary central processing unit which first receives said transmitted request prior to communicating the request to said server central processing unit.

3. A computer based method for facilitating the invocation of a CICS transaction within a server central processing unit via a client central processing unit communicated request, converting said

invoked transaction's output to an XML document and communicating said XML document to said client central processing unit comprising:

receiving an input request from a client;

converting said received request to a standardized format;

identifying said request as an initial or subsequent request by determining the presence or non-presence of a token communicated with the request;

creating data structures required to invoke a CICS transaction if initial request, or present data if responding to a prior request;

initiating a CICS transaction if initial request, or providing data to previously initiated transaction if responding to a prior request;

awaiting and identifying response to said transaction initiation or said data provision from a group of possible responses including the transaction issued an output command, the transaction issued an input command, the transaction ended, or the transaction ended abnormally;

continuing process execution based upon results of said identification;

generating an XML document based upon said continuing process execution; and

waiting for the next communicated input request.

4. The method of claim 3 wherein the response being identified as the transaction issued an output command further comprises saving the output command and related ADS and ADSD information.

1 5. The method of claim 3 wherein the response being identified as the transaction issued an input
2 command further comprises:

3 storing all output commands and associated data in a buffer to allow for simulation
4 of a 3270 type terminal;

5 processing all stored output commands;

6 generating an XML document based upon said output commands which have been
7 normalized; and

8 communicating said generated XML document to said client central processing unit.

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1 10. The method of claim 3 wherein the response being identified as the transaction ended further
2 comprises:

3 having determined the transaction requested immediate execution of a subsequent
4 transaction;

5 storing all commands and associated data in a buffer; and,

6 creating data structures and initiating any identified transactions to be immediately
7 invoked.

11. The method of claim 3 wherein the response being identified as the transaction ended further
comprises:

3 having determined the transaction did not request immediate execution of a
4 subsequent transaction;

5 storing all output commands and associated data in a buffer to allow for simulation
6 of a 3270 type terminal;

7 processing all stored output commands;

8 generating an XML document based upon said output commands which have been
9 normalized; and

10 communicating said generated XML document to said client central processing unit.

1 12. The method of claim 3 wherein said received input request is received in the form of an XML
2 document.

1 13. The method of claim 3 wherein said received input request is received in the form of
2 delimited URL data including an HTTP Query string.

1 14. The method of claim 3 wherein said identifying, creating, initiating, awaiting and waiting,
2 occurs in an iterative manner.

1 15. An apparatus for facilitating the invocation of a CICS transaction within a server central
2 processing unit via a client communicated central processing unit request, converting said invoked
3 transaction's output to an XML document and transmitting said XML document to said client central
4 processing unit comprising:

5 a general purpose computer;

6 a memory that stores a program which XML-enables CICS transactions; and

7 a central processing unit that, when executing said program, adapts said general
8 purpose computer to facilitate the invocation of a CICS transaction within said central
9 processing unit based upon a a client communicated central processing unit request, converts
10 said invoked transaction's output to an XML document and transmits said XML document
11 to a client central processing unit.

1 16. The apparatus of claim 15 wherein said executing program's adaptation of said general
2 purpose computer further comprises:

3 receiving an input request from a client;

4 converting said received request to a standardized format;

identifying said request as an initial or subsequent request by determining the presence
or non-presence of a token communicated with the request;
creating data structures required to invoke a CICS transaction if initial request, or
present data if responding to a prior request;
initiating a CICS transaction if initial request, or providing data to previously initiated
transaction if responding to a prior request;
awaiting and identifying response to said transaction initiation or said data provision
from a group of possible responses including the transaction issued an output command, the
transaction issued an input command, the transaction ended, or the transaction ended
abnormally;
continuing process execution based upon results of said identification;
generating an XML document based upon said continuing process execution; and
waiting for the next communicated input request.